



Female aviators face a dilemma.

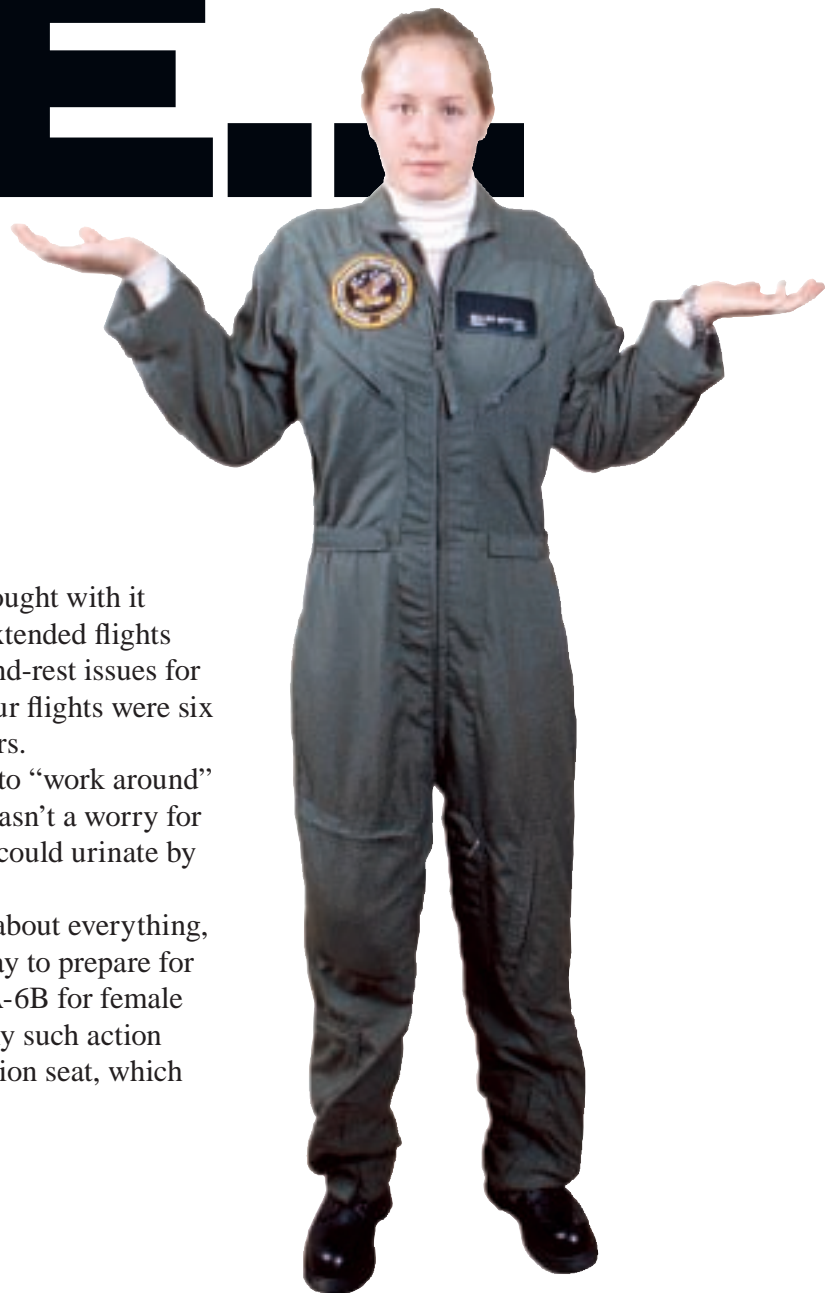
TO PEE, OR NOT TO PEE...

By an anonymous female aviator

Operation Enduring Freedom brought with it the challenge of long flights. Extended flights pushed the limit of crew-day-and-rest issues for Navy and Air Force aircrews. Many of our flights were six hours long, with some reaching nine hours.

Besides our mission tasking, we had to “work around” basic bodily processes. Soiling oneself wasn’t a worry for the males in our squadron, because they could urinate by using the Prowler relief tubes.

The females, however, had to worry about everything, which begins a debate over the proper way to prepare for long missions. It is not possible in the EA-6B for female aircrew to leave their seats and squat. Any such action would have to be done on top of the ejection seat, which is not safe.



Another option, slightly more practical, is using the strap-on Lady J device. This device acts as a funnel, guiding a woman's urine to the relief tube. This seems like a simple answer, but, maybe it's not. The Lady J device requires easy access to areas inaccessible when you're sitting in a seat or wearing a standard flight suit. There is an extended-fly flight suit out there that enables access, but acquiring one may be difficult.

The piddle pack, a time-honored relief device in many other platforms, is also a possibility. But, the same issue for women arises: They need some type of funnel to get urine to flow into the bag, or they have a messy situation. The piddle-pack option also requires an extended zipper for use in aircraft. In the past, females have stripped out of their gear, including flight suits, to use the piddle pack—moons over Afghanistan!

The next option is another time-honored tradition among female aviators, albeit unsafe. Known as "tactical dehydration," this technique works well. You simply cease taking in fluids well before your brief. Then you purge your bladder before walking and don't consume any more liquids until you're within a reasonable time to recovery. The downfall to this method is obvious: Dehydration brings headaches. The extreme circumstances of ejection, mixed with dehydration (in a desert environment), could be fatal. Obviously, "tactical dehydration" is not a wise choice.

The final option is an old, proven, standby in and out of aviation: the adult-incontinence undergarment, also known as diapers. They provide relief and wick away moisture to prevent irritation. This option doesn't seem appealing at first, but, when faced with holding your bladder for eight hours, you accept the swishing sound when walking to your jet. This option should be given a dry run, no pun intended, before operational use, to make sure no leakage occurs.

So, what is one to do? Until better-designed relief systems are available for female aviators, or missions become shorter, future war heroes have few options. One way to make the diaper option more appealing is to look at how diapers were depicted in the movie "The Right Stuff." It is one of my favorite movies, and it got me interested in flying. Think of the scene where Alan Shepard is in his suit on the launch pad. Unable to leave the cockpit, he relieved himself in his suit.

However, as I said earlier, the diaper will wick away the moisture; Alan Shepard had to sit in his.

The author flies with VAQ-139.


From the squadron safety officer.

VAQ-139 has four female aviators, three in the squadron and one assigned to CAG. Each has her strategies for dealing with long missions. But, the fact remains, female relief-system design needs to keep pace with the increasing number of female aviators and long missions in support of our nation's goals. We have identified this issue as an important lesson learned from deployment.

Note from the Aeromedical Division, Naval Safety Center.

The researchers at Air Crew Systems and the Naval Aerospace Medical Laboratories have addressed the topic of in-flight urination in tactical aviation. The latest information can be found in NAVAIR publication 13-1-6.5

Intentional dehydration is strongly discouraged because of the degradation of mental and physical performance that definitely will degrade operational capability, especially when considering G tolerance. Dehydration will impair mental alertness, lower blood pressure, increase heart rate, and increase the risk of G-induced loss of consciousness.

The Aeromedical Division of the Naval Safety Center, along with Chapter 8 of 3710, strongly recommend all aviators remain well-nourished and well-hydrated before and during all flights. This will necessitate using some type of urine-collection device during long missions. We recommend all commands work with their aviators to make sure the aviation survival-equipment shop has procured adequate authorized flight equipment. Also make sure supplies of collection devices are stocked on board the ship or at remote operations sites before deployment. 

Capt. Nicholas Webster, MD, MPH
Assistant Command Surgeon